Photographic Science and Engineering

Volume 21, Numbers 1–6

TITLE INDEX

January/February **(1)** 1–54
March/April **(2)** 55–110
May/June **(3)** 111–178
July/August **(4)** 179–248
September/October **(5)** 249–296
November/December **(6)** 297–336

Analysis of Characteristic Curves for Monodisperse Mono-Grainlayer Emulsions and the Minimum Size of Latent Image Speck
Mitsuo Kawasaki, Shin-ichi Fujiwara, and Hiroshi Hada, 290

Applying Psychophysics to Display Design
Roger W. Cohen, 56

A Surface Interaction Model for Triboelectrification of Toner-Carrier Pair
Lieng-Huang Lee, 228

A Visually Optimized Restoring Filter
Hans Marmolin, Sten Nyberg, and Ulf Berggrund, 142

Carbon-13 Nuclear Magnetic Resonance Studies on Gelatin Cross-linking by Formaldehyde
S. K. Taylor, F. Davidson, and D. W. Ovenall, 134

Characterization and Modeling of Corona Charging Devices
T. G. Davis, 204

Circular Dichroism Spectropolarimetric Characterization of J-Aggregate Species of Some Pyrylium Dyes
F. D. Saeva, G. R. Olin, S. R. Turner, J. F. Yanus, and D. J. Sandman, 129

Comparison of Luminescence Properties of Hydrogen-Sensitized and Other Reduction-Sensitized Films—Part II
L. F. Costa, G. A. Janusonis, and J. A. Merrigan, 301

Comparisons of Xerographic and Insulator-Photoconductor Sandwich Electrophotography Systems
Owen L. Nelson and Donald M. Korn, 189

Contrast Thresholds of Random Patterns
R. Frank Quick, Jr., W. W. Mullin, and Robert N. Lucas, 72

Decision Theory and the Detail Signal-to-Noise Ratio of Otto Schade
Robert F. Wagner, 41

Different Systems for the Visual Detection of High and Low Spatial Frequencies
Uwe Lupp, Gert Hauske, and Werner Wolf, 80

Dye-Sensitized Dichromated Gelatin for Holographic Optical Element Fabrication
Andrejs Graube, 37

Effect of Local Environment on the Ionization Energy of Adsorbed Cationic Dyes
R. C. Nelson and Panayiotis Yianoulis, 268

Electric Field Detachment of Toner
D. A. Hays, 232

Electrophotographic Characteristics of Overcoated Photoreceptors
Inan Chen, 168

Electrophotographic Systems Solid Area Response Model
K. Bradley Paxton, 159

Electrophotography Yesterday, Today, and Tomorrow
R. M. Schaffert, 149

Equilibrium Constants for Charge Transfer Complexes Between TNF and Various Carbazolyl Compounds
K. H. Brown and J. P. Montillier, 22

Evaluation of 3,5-Diamino-1,2,4-Dithiazolium Salts as Development Accelerators
H. W. Altland and I. A. Olivares, 263

Experiments on Latent Electrostatic Images and Electrophoretic Development. Comparison with Model Calculations
H.-G. Junginger, R. F. Schmidt, and R. Strunk, 213

Exposure Fluctuations in Model Photographic Emulsions. I: Grain-Shielding Effects on the Characteristic Curve
Eugene A. Trabka and J. H. B. Kemperman, 281

Fusing Against Bare Metal Surfaces. I: The Release Mechanisms
Donald A. Seanor, 240

Fusing Against Bare Metal Surfaces. II: Release Agent Chemistry
Donald A. Seanor, 243

Image Noise of Magnetic Brush Xerographic Development
R. N. Goren and J. F. Szczepanik, 235

Initiation Mechanism of the Reaction of Aromatic Amines with Carbon Tetrachloride
T. Iwasaki, T. Sawada, M. Okuyama, and H. Kamada, 312

Kinetic Analysis of the Structuralization of Hardened Gelatin Layers by Studying Swelling Phenomena
F. H. Claes, A. Boulonne, and R. Beels, 28

Latent-Image Fading in a Silver Bromide Emulsion
Stephan J. W. Platzer, 255

Low Spatial Frequencies and Low Number of Cycles at Low Luminances
Robert L. Savoy, 76

Matched Filters—A New Concept in Vision
G. Hauske, U. Lupp, and W. Wolf, 59

Memory Effect of an Organic Photoconductor and Its Use for an Electrostatic Duplication Master
Eiichi Inoue, Isamu Shimizu, and Yoshihiro Nishio, 194

Model Formation of Latent Image Centers
V. Platikanova and K. Starbova, 6

Multidimensional Scaling
J. Edward Jackson, 97
Normal Development, Reversal Development, and Composite Processing: A New Method of Gaining a Simultaneous Improvement in Latitude and Detective Quantum Efficiency in Silver Halide Films
George R. Bird, 328
Numerical Modeling of Two-Dimensional DC Corotrons
B. E. Springett, F. M. Tesche, A. R. Davies, and J. A. L. Thompson, 200
On the Nature of Light Induced ESR Signal in Dyed Silver Halide Powders and Emulsions Containing Dyes
N. P. Kocherov, 132
Photoconductivity and Luminescence of an AgBr:I Emulsion at −186°C as a Function of Incident Light Intensity
Susan S. Collier, 10
Photodelamination Imaging—A New Approach in Dry Processing
T. Nakayama and K. Shimazu, 138
Photosensitization Processes in Molecular Solids
S. Grammatica and J. Mort, 165
Pulsed Luminescence Experiments on Silver Halide Microcrystals
D. L. Wilhite, 322
Quantitative Correlations Between Sensitization by Dyes and Their Redox Potentials. II: Reduction Sensitized Emulsion
Ingo H. Leubner, 271
Quantitative Methods for Selecting Reference Imagery for Correlation Guidance Applications
Eamon Barrett, 46
Random Nucleated Halftone Screen
Jan P. Allebach, 89
Reflection of Light from Toned Paper
P. E. Castro and W. C. Lu, 154
Research Methods and Strategies in the Psychophysics of Image Quality
Selby Evans and William L. Attaya, 92
Scale-up Factors in the Batch Precipitation of Silver Halide Photographic Emulsions
Edgar B. Gutoff, S. R. Cottrell, and E. G. Denk, 325
Sensitization Caused by Thiolic Antifoggants
Tadaaki Tani, 179
Sensitization of Photographic Film in Elevated-Temperature Hydrogen Gas and Its Development—Part I
G. A. Janusonis, 297
Spectral Sensitization Process of Cu-doped CdS by Cyanine Dyes
Hisashi Nakatsui and Yasushi Hishiki, 18
Studies on Electrophoretic Developers for Pictorial Electrophotography
R. Kohler, D. Giglberger, and F. Bestenreiner, 218
Subjective Effects of Electronic and Turbulent Noise on Image Evaluation
To R. Hsing and D. Poularikas, 85
Supersensitized Photoconductance with Two Chromophoretically Degenerate Dyes
Allan P. Piechowski and George R. Bird, 306
The Concentration Theory of Latent Image Formation
J. W. Mitchell, 249
The pH-Dependence of Cyanine Adsorption to AgBr
W. L. Gardner and A. H. Herz, 13
The Psychophysics of Image Coloration
W. A. Thornton, 102
Thermally Developable Light-Sensitive Systems Based on Organotellurium Compounds
W. E. Nixon and J. W. Mitchell, 111
The Stable Latent Image
J. W. Mitchell, 1
The Ultimate Capabilities of Organic Imaging Systems II: Overcoming the Problems of Thermal Instability and Fog
George R. Bird, William D. Pandolfe, and Shigeki Shimizu, 122
Thresholds for Perceived Image Sharpness
C. R. Carlson, 69
Towards a Quantum Chemical Model of the Photographic Process
M. R. V. Sahyun, 317
Visibility of Gradients and Low Spatial Frequency Sinusoids: Evidence for a Distance Constancy Mechanism
John J. McCann, 64

AUTHOR INDEX

Allebach, J. P.
Random Nucleated Halftone Screen, 89
Altland, H. W., and Olivares, I. A.
Evaluation of 3,5-Diamino-1,2,4-Dithiazolium Salts as Development Accelerators, 263
Attaya, W. L. *See* Evans, S., 92
Barrett, E.
Quantitative Methods for Selecting Reference Imagery for Correlation Guidance Applications, 46
Beels, R. *See* Claes, F. H., et al., 28
Berggrund, U. *See* Marmolin, H., et al., 142
Bestenreiner, F. *See* Kohler, R., et al., 218
Bird, G. R. *See* Piechowski, A. P., 306
Normal Development, Reversal Development, and Composite Processing: A New Method of Gaining a Simultaneous Improvement in Latitude and Detective Quantum Efficiency in Silver Halide Films, 328
—Pandolfe, W. D., and Shimizu, S.
The Ultimate Capabilities of Organic Imaging Systems II: Overcoming the Problems of Thermal Instability and Fog, 122
Boulonne, A. *See* Claes, F. H., et al., 28
Bradley Paxton, K.
Electrophotographic Systems Solid Area Response Model, 159
Brown, K. H., and Montillier, J. P.
Equilibrium Constants for Charge Transfer Complexes Between TNF and Various Carbazolyl Compounds, 22
Carlson, C. R.
Thresholds for Perceived Image Sharpness, 69
Castro, P. E., and Lu, W. C.
Reflection of Light from Toned Paper, 154
Chen, I.
Electrophotographic Characteristics of Overcoated Photoreceptors, 168
Claes, F. H., Boulonne, A., and Beels, R.
Kinetic Analysis of the Structuralization of Hardened Gelatin Layers by Studying Swelling Phenomena, 28
Cohen, R. W.
Applying Psychophysics to Display Design, 56
Collier, S. S.
Photoconductivity and Luminescence of an AgBr:I Emulsion at −186°C as a Function of Incident Light Intensity, 10
Costa, L. F., Janusonis, G. A., and Merrigan, J. A.
Comparison of Luminescence Properties of Hydrogen-Sensitized and Other Reduction-Sensitized Films—Part II, 301
Cottrell, S. R. *See* Gutoff, E. B., et al., 325
Davidson, F. *See* Taylor, S. K., et al., 134
Davies, A. R. *See* Springett, B. E., et al., 200
Davis, T. G.
Characterization and Modeling of Corona Charging Devices, 204
Denk, E. G. *See* Gutoff, E. G., et al., 325
Evans, S., and Attaya, W. L.
Research Methods and Strategies in the Psychophysics of Image Quality, 92
Fujiwara, S. *See* Kawasaki, M., et al., 290
Gardner, W. L., and Herz, A. H.
The pH-Dependence of Cyanine Adsorption of AgBr, 13
Giglberger, E. *See* Kohler, R., et al., 218
Goren, R. N., and Szczepanik, J. F.
Image Noise of Magnetic Brush Xerographic Development, 235
Grammatica, S., and Mort, J.
Photosensitization Processes in Molecular Solids, 165
Graube, A.
Dye-Sensitized Dichromated Gelatin for Holographic Optical Element Fabrication, 37
Gutoff, E. G., Cottrell, S. R., and Denk, E. G.
Scale-up Factors in the Batch Precipitation of Silver Halide Photographic Emulsions, 325
Hada, H. *See* Kawasaki, M., et al., 290
Hauske, G., Lupp, U., and Wolf, W.
Matched Filters—A New Concept in Vision, 59
Hauske, G. *See* Lupp, U., et al., 80
Hays, D. A.
Electric Field Detachment of Toner, 232
Herz, A. H. *See* Gardner, W. L., 13
Hishiki, Y. *See* Nakatsui, H., 18
Hsing, T. R., and Poularikas, A. D.
Subjective Effects of Electronic and Turbulent Noise on Image Evaluation, 85
Inoue, E., Shimizu, I., and Nishio, Y.
Memory Effect of an Organic Photoconductor and Its Use for an Electrostatic Duplication Master, 194
Iwasaki, T., Sawada, T., Okuyama, M., and Kamada, H.
Initiation Mechanism of the Reaction of Aromatic Amines with Carbon Tetrachloride, 312
Jackson, J. E.
Multidimensional Scaling, 97
Janusonis, G. A. *See* Costa, L. F., et al., 301
Sensitization of Photographic Film in Elevated-Temperature Hydrogen Gas and Its Development—Part I, 297
Junginger, H.-G., Schmidt, R. F., and Strunk, R.
Experiments on Latent Electrostatic Images and Electrophoretic Development Comparison with Model Calculations, 213
Kamada, H. *See* Twasaki, T., et al., 312
Kawasaki, M., Fujiwara, S., and Hada, H.
Analysis of Characteristic Curves for Monodisperse Mono-grain-layer Emulsions and the Minimum Size of Latent Image Speck, 290
Kemperman, H. B. *See* Trabka, E., 281
Kocherov, N. P.
On the Nature of Light Induced ESR Signal in Dyed Silver Halide Powders and Emulsions Containing Dyes, 132
Kohler, R., Giglberger, D., and Bestenreiner, F.
Studies on Electrophoretic Developers for Pictorial Electrophotography, 218
Korn, D. M. *See* Nelson, O. L., 189
Lee, L.-H.
A Surface Interaction Model for Triboelectrification of Toner-Carrier Pair, 228
Leubner, I. H.
Quantitative Correlations Between Sensitization by Dyes and Their Redox Potentials. II: Reduction Sensitized Emulsion, 271
Lu, W. C. *See* Castro, P. E., 154
Lucas, R. N. *See* Quick, F. R., 72
Lupp, U., Hauske, G., and Wolf, W.
Different Systems for the Visual Detection of High and Low Spatial Frequencies, 80
Lupp, U. *See* Hauske, et al., 59
Marmolin, H., Nyberg, S., and Berggrund, U.
A Visually Optimized Restoring Filter, 142
McCann, J. J.
Visibility of Gradients and Low Spatial Frequency Sinusoids: Evidence for a Distance Constancy Mechanism, 64
Merrigan, J. A. *See* Costa, L. F., et al., 301
Mitchell, J. W.
The Concentration Theory of Latent Image Formation, 249
See Nixon, W. E., 111
The Stable Latent Image, 1
Montillier, J. P. *See* Brown, K. H., 22

Mort, J. *See* Grammatica, S., 165
Mullins, W. W. *See* Quick, F. R., Jr., et al., 72
Nakatsui, H., and Hishiki, Y.
Spectral Sensitization Process of Cu-doped CdS by Cyanine Dyes, 18
Nakayama, T., and Shimazu, K.
Photodelamination Imaging—A New Approach in Dry Processing, 138
Nelson, O. L., and Korn, D. M.
Comparisons of Xerographic and Insulator-Photoconductor Sandwich Electrophotography Systems, 189
Nelson, R. C., and Yianoulis, P.
Effect of Local Environment on the Ionization Energy of Adsorbed Cationic Dyes, 268
Nishio, H. *See* Inoue, E., et al., 194
Nixon, W. E., and Mitchell, J. W.
Thermally Developable Light-Sensitive Systems Based on Organotellurium Compounds, 111
Nyberg, S. *See* Marmolin, H., et al., 142
Okuyama, M. *See* Iwasaki, T., et al., 312
Olin, G. R. *See* Saeva, F. D., et al., 129
Olivares, I. A. *See* Altland, H. W., 263
Ovenall, D. W. *See* Taylor, S. K., et al., 134
Pandolfe, W. D. *See* Bird, G. R., et al., 122
Piechowski, A. P., and Bird, G. R.
Supersensitized Photoconductance with Two Chromophoretically Degenerate Dyes, 306
Platikanova, V., and Starbova, K.
Model Formation of Latent Image Centers, 6
Platzer, S. J. W.
Latent-Image Fading in a Silver Bromide Emulsion, 255
Poularikas, A. D. *See* Hsing, T. R., 85
Quick, F. R., Jr., Mullins, W. W., and Lucas, R. N.
Contrast Thresholds of Random Patterns, 72
Saeva, F. D., Olin, G. R., Turner, S. R., Yanus, J. F., and Sandman, D. J.
Circular Dichroism Spectropolarimetric Characterization of J-Aggregate Species of Some Pyrilium Dyes, 129
Sahyun, M. R. V.
Towards a Quantum Chemical Model of the Photographic Process, 317
Sandman, D. J. *See* Saeva, F. D., et al., 129
Savoy, R. L.
Low Spatial Frequencies and Low Number of Cycles at Low Luminances, 76
Sawada, T. *See* Iwasaki, T., et al., 312
Schaffert, R. M.
Electrophotography Yesterday, Today, and Tomorrow, 149
Schmidt, R. F. *See* Junginger, H.-G., et al., 213
Seanor, D. A.
Fusing Against Bare Metal Surfaces. I: The Release Mechanisms, 240
Fusing Against Bare Metal Surfaces. II: Release Agent Chemistry, 243
Shimazu, K. *See* Nakayama, T., 138
Shimizu, I. *See* Inoue, E., et al., 194
Shimizu, S. *See* Bird, G. R., et al., 122
Springett, B. E., Tesche, F. M., Davies, A. R., and Thompson, J. A. L.
Numerical Modeling of Two-Dimensional DC Corotrons, 200
Starbova, K. *See* Platikanova, V., 6
Strunk, R. *See* Junginger, H.-G., et al., 213
Szczepanik, J. F. *See* Goren, R. N., 235
Tani, T.
Sensitization Caused by Thiolic Antifoggants, 179
Tylor, S. K., Davidson, F., and Ovenall, D. W.
Carbon-13 Nuclear Magnetic Resonance Studies on Gelatin Crosslinking by Formaldehyde, 134
Tesche, F. M. *See* Springett, B. E., et al., 200
Thompson, J. A. L. *See* Springett, B. E., et al., 200
Thornton, W. A.
The Psychophysics of Image Coloration, 102
Trabka, E. A., and Kemperman, J. H. B.
Exposure Fluctuations in Model Photographic Emulsions. I: Grain Shielding Effects on the Characteristic Curve, 281
Turner, S. R. *See* Saeva, F. D., et al., 129
Wagner, R. F.
Decision Theory and The Detail Signal-to-Noise Ratio of Ott Schade, 41
Wilhite, D. L.
Pulsed Luminescence Experiments on Silver Halide Microcrystals, 322
Wolf, W. *See* Hauske, et al., 59
Wolf, W. *See* Lupp, U., et al., 80
Yanus, J. F. *See* Saeva, F. D., et al., 129
Yianoulis, P. *See* Nelson, R. C., 268